



Inside This Issue:

Physical Abuse Questions in PRAMS (1996-1999)	2
How Does Michigan Compare to Other States on Physical Abuse?	3
Social Experiences of Women Abused During Pregnancy	3
What Else Does PRAMS Tell Us?	4
Current Literature Pertaining to Physical Abuse During Pregnancy	5
Domestic Violence Information for Health Care Providers	5

Highlights:

- From 1996 to 1999, 6.1 percent of Michigan women were abused in the year preceding their pregnancies and 4.4 percent were abused during pregnancy
- Women abused during pregnancy were more likely to be black, have less than a high school education, and to smoke before and during pregnancy as compared with non-abused women, although abuse did occur in all sociodemographic groups
- More than 60 percent of abused women reported experiencing five or more stressors in the 12 months before their deliveries compared with only 10.8 percent of non-abused women

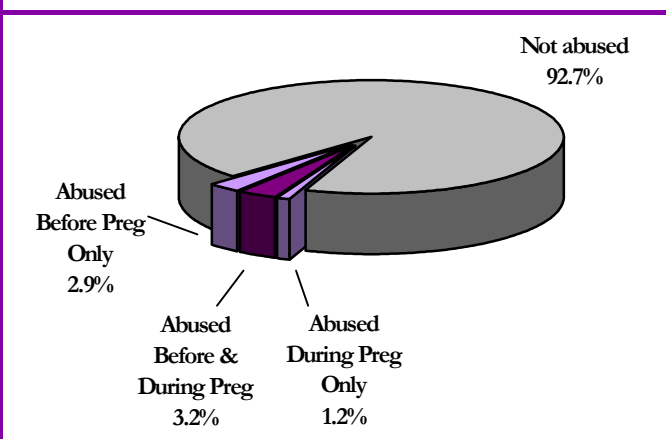
Antepartum Physical Abuse

Violence against women is increasingly being recognized as an important public health problem. The Pregnancy Risk Assessment Monitoring System (PRAMS) is the only known ongoing source of information about the physical abuse of women in Michigan before and during pregnancy. The PRAMS data presented is representative of all women in Michigan who delivered a live birth during the study period (see "PRAMS Overview," pg. 6).

PRAMS defines physical abuse as "pushing, hitting, slapping, kicking, or any other way of physically hurting someone." In the version of PRAMS administered in the years 1996 to 1999, there are two questions that assess presence of physical abuse and one question that ascertains frequency of abuse (see page 2). For the purposes of this study, a woman was classified as being abused if she selected at least one of the boxes identifying an abuser.

Between the years 1996 and 1999, 2.9 percent of women in Michigan were physically abused in the 12 months before pregnancy only, 3.2 percent were abused both before pregnancy and during pregnancy, and 1.2 percent were abused during

Figure 1. Prevalence of Physical Abuse around the time of pregnancy, Michigan, 1996-1999



pregnancy only (Fig. 1). Thus, a total of 7.3 percent of women were abused around the time of pregnancy. This prevalence translates into approximately 36,600 Michigan women being physically abused around the time of pregnancy over the four-year time period. The prevalence of physical abuse generally declined during the study period, from 7.7 percent in 1996 to 4 percent in 1999 for abuse before pregnancy and 5.7 percent in 1996 to 3.7 percent in 1999 for abuse during pregnancy.

Of women abused during pregnancy, over two-thirds named their husbands or partners as an assailant, 11.7 percent named a family member, 6.3 percent named a friend, and 14.9 percent named someone else. The

majority of women abused during their pregnancies were abused by only one individual; 4.1 percent identified multiple attackers.

Of all women abused during pregnancy, more than a quarter reported that they were abused more often during pregnancy than in the 12 months before pregnancy, 31.1 percent were abused less often during pregnancy, and 20.2 percent were abused approximately the same amount. More than 20 percent of women abused during pregnancy were not abused during the 12 months before pregnancy.

Although the following information focuses on women abused during pregnancy, the findings
(Continued on page 2)



October is
Domestic
Violence
Awareness
month



“The prevalence of physical abuse [during pregnancy] generally declined during the study period, from...5.7 percent in 1996 to 3.7 percent in 1999...”

Physical Abuse Questions in PRAMS (1996-1999)

- During the 12 months before you got pregnant with your new baby, did any of these people physically abuse you?
Check all that apply.

 - My husband or partner
 - A family or household member other than my husband or partner
 - A friend
 - Someone else: _____
 - No one physically abused me during the 12 months before I got pregnant
- During your most recent pregnancy, did any of these people physically abuse you?
Check all that apply.

 - My husband or partner
 - A family or household member other than my husband or partner
 - A friend
 - Someone else: _____
 - No one physically abused me during the 12 months before I got pregnant
- During your most recent pregnancy, would you say that you were physically abused more often, less often, or about the same compared with the 12 months before you got pregnant?
Check only one.

 - I was physically abused more often during my pregnancy
 - I was physically abused less often during my pregnancy
 - I was physically abused about the same during my pregnancy
 - No one physically abused me during the 12 months before I got pregnant

(Continued from page 1)
regarding women abused before pregnancy are similar.

Women who were abused during pregnancy differed significantly from women who were not abused according to several sociodemographic, behavioral, and perinatal factors. A higher proportion of black women were abused (7.3 percent) than white women (3.7 percent). Women with lower levels of education were more likely to be abused. Compared with an abuse prevalence of 2.3 percent in women with education beyond high school, 5 percent of women with a high school education were abused and 8.9 percent of women with less than a high school education were abused. A higher percentage of younger women were abused as compared with older women. Whereas 9.6 percent of women less than 20 years of age were abused, 4.6 percent of women between 20 and 29 years and 2 percent of women 30 years and older were abused.

Among women who acknowledged paternity on the birth certificate, 2.4 percent were abused while 8.3 percent of women who did not acknowledge paternity were abused.

Women abused during pregnancy were significantly more likely to smoke during the last three months of pregnancy as well as during the three months prior to pregnancy. Among abused women, 50.9 percent smoked prior to pregnancy and 38.8 percent smoked during pregnancy compared with a 30.4 percent prevalence of smoking prior and an 18.6 percent prevalence of smoking during pregnancy among non-abused women. The prevalence of drinking during and before pregnancy was nearly the same for both abused and non-abused women, with an approximate 50 percent prevalence before pregnancy and a 5 percent prevalence during pregnancy in both groups.

The incidence of low birth weight was higher among women abused during pregnancy — 10.4 percent of these births were low weight births — compared with a low birth weight incidence of 7.2 percent among women who were not abused. However, this difference was not significant after controlling for education, race, and smoking. Although women abused during pregnancy had a prematurity incidence of 9.9 percent, higher than the 8.9 percent seen among non-abused women, this difference was not statistically significant.

It should be noted that almost any assessment of abuse is likely an underestimate due to the sensitive nature of the topic. In addition, while the PRAMS survey is useful in determining presence of physical abuse, it does not measure other forms of abuse that may occur, such as sexual or psychological abuse.

How Does Michigan Compare to Other States on Physical Abuse?¹

Figure 2. Prevalence of Abuse Before Pregnancy by Husband or Partner, 1998

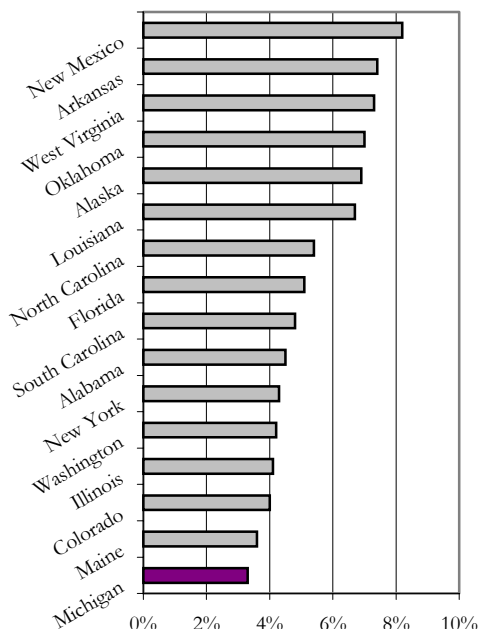
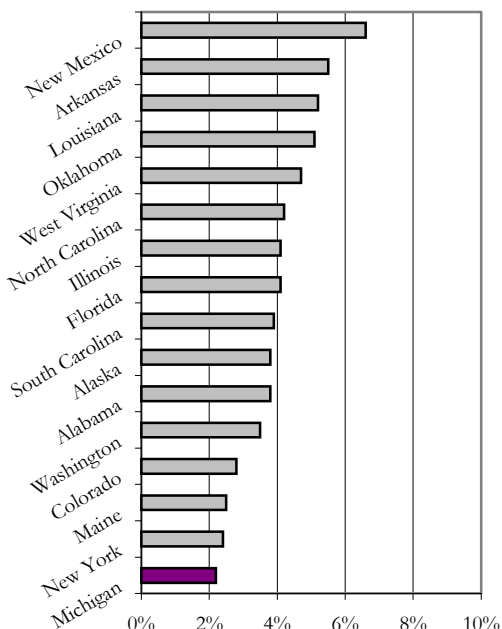


Figure 3. Prevalence of Abuse During Pregnancy by Husband or Partner, 1998



Social Experiences of Women Abused During Pregnancy

Stress Experienced in 12 months Before Delivery (Includes Pregnancy)

- Of the 13 stressors listed in PRAMS, women abused during pregnancy were most likely to report: arguing with their husband or partner more often than usual (74.2 percent), moving to a new address (65.8 percent), being involved in a physical fight (59.2 percent), and having a lot of bills they could not pay (52.8 percent), all of which were significantly higher than the prevalence of these stressors among non-abused women.
- Compared with women who were not abused, abused women were also more likely to have a person close to them with a bad drinking or drug problem (48.1 percent vs. 14.2 percent), to have gone through a divorce (46.0 percent vs. 9.5 percent), to have lost their job (21.7 percent vs. 8.7 percent), and to have been homeless (10.7 percent vs. 1.4 percent).
- Abused women were also significantly more likely to have experienced a greater total number of stressors (see Figure 4, pg. 4).

Services Needed and Received

- Women abused during pregnancy reported greater need for most services as compared with non-abused women, including funding for food (75.4 percent vs. 38.2 percent), counseling (39.0 percent vs. 7.0 percent), stress reduction (61.5 percent vs. 25.8 percent), and smoking cessation (25.2 percent vs. 10.1 percent).
- Among those who needed individual services, women abused during pregnancy did not differ significantly from non-abused women on receipt of the majority of those services. Of all abused women, 33.1 percent who needed smoking cessation services received them, 58.9 percent who needed transportation to the doctor received it, 43.6 percent who needed counseling services received them, and 29.5 percent who needed services to reduce home violence received them.
- Women abused during pregnancy stated the need for a higher number of services; 35.1 percent needed five or more services, 59.7 percent needed one to four services, and 5.2 percent needed no services. Among non-abused women, 11.4 percent needed five or more services, 61.0 percent needed one to four services, and 27.6 percent needed no services.

Abused women demonstrated the necessity of referrals to community-based services.

Abused women were significantly more likely than non-abused women to say that they did not obtain prenatal care as early as they wanted because they lacked transportation and they had too many other things going on in their lives.

The prevalence of all women who were counseled about physical abuse by a health care professional rose steadily during the study period, from 23.2 percent in 1996 to 36.4 percent in 1999

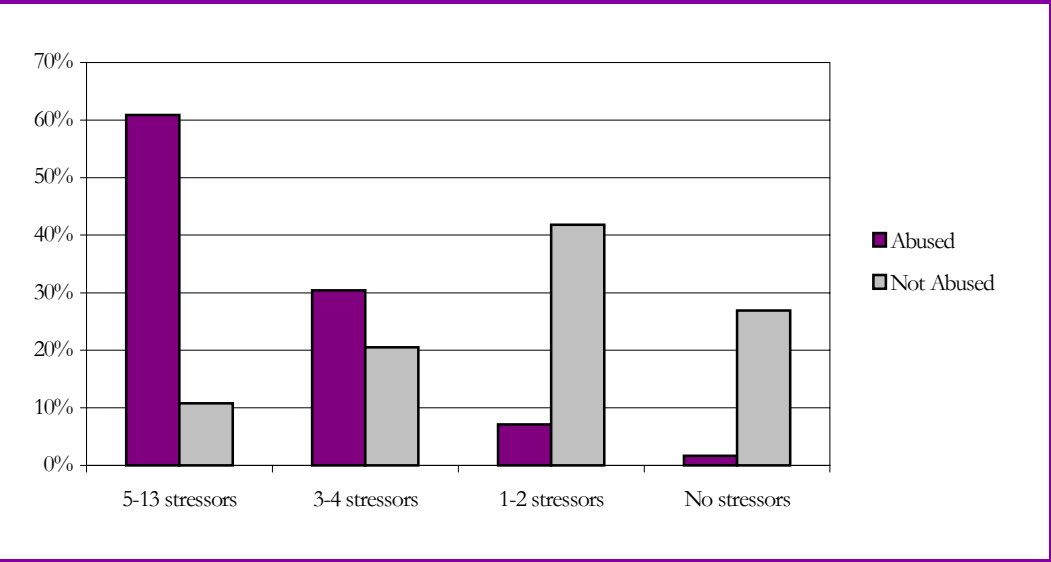
What Else Does PRAMS Tell Us?

Physically Abused Before Pregnancy		Abused Before Preg	Not Abused
<u>Pregnancy Intendedness</u>			
Unintended Pregnancies		67.8%	40.8%
Wanted pregnancy later or not at all			
<u>Pregnancy Planning</u>			
Unplanned Pregnancies, Birth Control Use		30.3%	21.4%
Used birth control at time of pregnancy			
Unplanned Pregnancies, No Birth Control Use		53.1%	31.0%
No birth control use but woman did not want to become pregnant			
Planned Pregnancies		16.6%	47.6%
No birth control use because woman wanted to become pregnant			

Physically Abused During Pregnancy		Abused During Preg	Not Abused
<u>Prenatal Care (PNC)</u>			
Late PNC entry (after 1st trimester) or no PNC		26.8%	10.7%
PNC was not obtained early enough		40.5%	17.8%
Woman did not enter PNC as early as she wanted			
Was counseled about physical abuse during PNC visit		42.2%	28.7%
Was counseled about HIV prevention during PNC visit		66.0%	51.0%
Was counseled about effects of drug use on baby during PNC visit		80.9%	72.1%
<u>Maternal Morbidities</u>			
Hospital stay during pregnancy		32.7%	16.3%
Excluding delivery			
Stayed for premature labor		13.9%	6.4%
Stayed for vaginal bleeding		4.8%	1.3%
Stayed for kidney or bladder infection		7.6%	1.6%

All "abused" and "not abused" prevalences are significantly different (p<.05)

Figure 4. Total number of stressors experienced by abused and non-abused women



Current Literature Pertaining to Physical Abuse During Pregnancy

- A 1995 literature review estimated that violence occurs in 0.9 percent to 20.1 percent of pregnancies, although in reality the range is likely 3.9 percent to 8.3 percent, making physical abuse more common than pregnancy-related conditions that are routinely screened for, such as gestational diabetes and preeclampsia.²
- Physical abuse is difficult to measure and compare across studies for several reasons. A variety of instruments exist to ascertain abuse; abuse occurs in several different forms — physical, sexual, psychological; presence of abuse may be obtained in different formats — via telephone, personal interview, survey; and abuse may occur at different time points during pregnancy and with differing frequency and severity.³⁻⁶
- Abuse has been associated with many socioeconomic conditions and social behaviors. For example, it has been found that women who are abused are much more likely to smoke and drink, have lack of social support, have housing problems, and have inadequate prenatal care.⁷
- Physical abuse during pregnancy has been linked with adverse birth outcomes in some studies. Hypothesized mechanisms of this relationship are generally categorized as direct or indirect. Direct mechanisms involve the potential biological effects of abdominal trauma, including abruptio placentae, fetal or maternal fractures, or rupture of the uterus, which may in turn produce adverse birth outcomes. Some indirect mechanisms that have been identified include psychosocial stress, inadequate maternal nutrition, isolation of the mother from appropriate health services, and maternal behavioral risk-taking.⁸
- Research has indicated that abuse is not routinely screened for during prenatal visits. One study found that 17 percent of physicians screened at the initial prenatal visit and 5 percent at subsequent visits, whereas 25 percent never screened for abuse during visits. Another survey of OB/GYN's found that between 17 percent and 39 percent screened at the first prenatal visit.^{9,10}

It is estimated that abuse occurs in 3.9 percent to 8.3 percent of pregnancies, making it more common than gestational diabetes of preeclampsia.

“In accordance with Michigan law, acts of violent injury must be immediately reported by medical personnel.”

Domestic Violence Information for Health Care Providers

Screening¹¹

Warning signs of intimate partner violence include: a previous history of injuries; a history of abuse; a history of depression or substance abuse; a history of chronic pelvic pain, headaches, vaginitis, or irritable bowel syndrome.

Women being subjected to violence may provide the following behavioral clues to health care personnel: presentation of flat affect; fright, depression, or anxiety; overcompliance; excessive distrust; and symptoms of post-traumatic stress disorder, including startle response to touch. Alternately, the patient's partner may be hostile and demanding; may answer questions for the

woman; may monitor the woman's behavior and responses to questions; and may refuse to leave the woman alone with a health care provider.

Providers can administer simple screening tools. For example, he or she should ask if the patient has been hit, kicked, or slapped by anyone in the last year or since the beginning of pregnancy; if the woman has been forced to perform sexual acts against her will; and if she is afraid of her partner or anyone else. These tools may best be administered in person-to-person format, as it has been shown that interview techniques are more effective than surveys at eliciting presence of violence.¹²

Reporting Requirements

In accordance with Michigan law, injuries caused by violence must be immediately reported to law enforcement by medical personnel. Specifically, an agent of the hospital or pharmacy where the injured patient presents, or the physician or surgeon in charge of the patient's care, must notify the police in the jurisdiction in which they are located (or the county sheriff in the event that there is no local police department), by telephone and in writing. Violent injury encompasses injury inflicted by knife, gun, pistol, or other deadly weapon, or any other means of violence. [MCL 750.411]

Women suffering from domestic violence may contact the National Domestic Violence Hotline at 1-800-799-SAFE (7233) or may contact the Michigan Coalition Against Domestic and Sexual Violence at 1-517-347-7000 to find a shelter in their area.



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PRAMS Overview

PRAMS (Pregnancy Risk Assessment and Monitoring System) is a population based survey of maternal experiences and behaviors before and during a woman's pregnancy and during early infancy of her child. African-American women and women who deliver low birth weight infants are over-sampled in order to ensure more accurate estimates. Each year, approximately 1,000-3,000 new mothers are randomly selected from a frame of eligible birth certificates. A survey is mailed out to the women at two to six months after delivery, followed by telephone reminders to those who have not responded. In addition to the mailed surveys, a stratified systematic sample of African-American mothers is selected from six inner-city hospitals, where an initial interview is conducted followed by a mailed survey two to six months later. This is so we can better capture the experiences among African-American mothers and their infants. The results presented are weighted to represent all of Michigan's mothers and infants.

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Suggested Citation

Reznar M, Zhu B, Smith PK, Bouraoui Y, Miller K, Paterson D, Michigan Department of Community Health. *MI PRAMS Delivery*. Volume 1, Number 4. Lansing, MI: Division of Family and Community Health, Michigan Department of Community Health, October 2002.